THERE IS CLAIMED:

1. A branching unit adapted to be integrated into a submarine telecommunication system comprising at least three cables having optical and electrical transmission members, said unit comprising three terminals connected to the electrical transmission members of the cables, three input points, and three electrical contacts each between one of said terminals and one of said input points, in which unit, in an operating configuration, and at a given time, a first terminal and a second terminal are electrically connected together and form a trunk segment adapted to convey a trunk current, and a third terminal is electrically connected to a submarine ground to form a branch segment adapted to convey a branch current, said branching unit further comprising reconfiguration means adapted to control said electrical contacts for switching purposes, voltage measuring means for measuring a voltage indicating the potential at a point on said trunk segment, means for receiving and processing optical reconfiguration signals, any optical reconfiguration request being made by means of an optical reconfiguration signal, and reconfiguration validation means coupled to said voltage measuring means and to said reception and processing means and adapted to activate said reconfiguration means in accordance with said optical reconfiguration signal only if the absolute value of said potential is below a threshold.

2. The branching unit claimed in claim 1 wherein said voltage measuring means are associated with a voltage divider between said point on said trunk segment and a point on said branch segment.

3. The branching unit claimed in claim 2 wherein said voltage divider is of the resistive type and comprises at least one first resistor connected to one end of one of said trunk segment points and branch segment points and at the other end to a second resistor of greater value than said first resistor and connected to the other of said trunk segment points and branch segment points.

4. The branching unit claimed in claim 1 wherein said threshold is less than or equal to 100 V.

5. The branching unit claimed in claim 1 wherein said three sliding electrical contacts are electromechanical, each electrical contact is formed of a

mobile first conductive part and a second conductive part, and said first mobile parts are fastened to said second parts in an operating configuration and slide on said second parts for switching.

6. The branching unit claimed in claim 5 wherein said mobile conductive parts are fastened to the same mobile support for simultaneous switching, said switching operations are coupled, and the lengths of said mobile conductive parts are greater than the distances between two second parts.
7. The branching unit claimed in claim 5 wherein said sliding contacts are chosen from contacts that move in a straight line and contacts that move about a rotation axis.
8. The branching unit claimed in claim 1 comprising means for identifying the existence and the sign of said trunk current at said first and second terminals and means for identifying the existence and the sign of said branch current at said third terminal and wherein said optical request defines two of said three terminals to form a reconfigured trunk and said reconfiguration validation means are adapted to authorize said optical request only if the currents at the terminals defined for said reconfigured trunk are of opposite sign or zero in the operating configuration.
9. The branching unit claimed in claim 1 comprising means for storing said optical configuration signal.
10. The branching unit claimed in claim 1 comprising at least one first electronic control card supplied with power by one of said trunk and branch currents and incorporating all of said means and a second electronic control card supplied by the other of said trunk and branch currents and comprising means similar to said means of said first card.
11. A submarine telecommunication system comprising at least three equipments chosen from terrestrial terminals and branching units and connected to said cables, at least one of said equipments being connected to or corresponding to a terrestrial terminal comprising means for sending optical configuration signals, and at least one branching unit as claimed in any of claims 1 to 10.
12. A method of reconfiguring a submarine telecommunication system as claimed in claim 11, said method comprising sending said optical reconfiguration signal to said branching unit, voltage measurement by

said voltage measuring means, validation of reconfiguration in accordance with said optical reconfiguration signal if the absolute value of said potential is below said threshold, and reconfiguration comprising switching said electrical contacts.

13. The method claimed in claim 12 of reconfiguring a submarine telecommunication system wherein switching is effected by simultaneous and coupled movements of said mobile first parts of said sliding contacts.

14. The method claimed in claim 12 of reconfiguring a submarine telecommunication system comprising, before sending, adjusting voltages at terrestrial terminals associated with said trunk current to obtain said threshold whilst maintaining said trunk current.

15. The method claimed in claim 12 of reconfiguring a submarine telecommunication system comprising, after sending, progressively correcting the voltages at terrestrial terminals associated with said trunk current in order to obtain said threshold whilst maintaining said trunk current.